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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/588,020	06/06/2000	EIJI NISHIKAWA	106422	9038

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ALEXANDRIA, VA 22320

EXAMINER

ABDULSELAM, ABBAS I

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/588,020

Applicant(s)

NISHIKAWA, EIJI

Examiner

Abbas I Abdulsalam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see # 17, filed 06/09/04 with respect to the rejection(s) of claim(s) 1-4 and 6-14 under U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kim (USPN 6304431).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (USPN 5774105) in view of Ishizawa et al. (USPN 6411282) and Kim (USPN 6304431).

Regarding claims 1 and 6, Yamamoto teaches the use of plural display devices with one display device for displaying system data having a memory characteristics and another device needing no memory characteristics. Yamamoto teaches a ferroelectric liquid crystal having memory characteristics, data and power system such that the data before cutting-off the power is

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redisplayed. See col. 3, lines 48-53 and col. 7, lines 34-46. Yamamoto discloses that that when switching power supply is tuned off, the power supply controller (7) continues to supply liquid crystal drive voltages to liquid crystal panels (2a, 2b) for a prescribed period. See col. 7, lines 5-21 and Fig. 6. Yamamoto, referring to Fig. 1 also teaches that the power controller (7) is designed to supply optimum liquid crystal drive voltages to drive IC for the liquid crystal panels (2a, 2b). See col. 6, lines 7-10 and Fig. 1. However, Yamamoto does not teach a connector for delivering electric power and for sending information, the information sent being displayable on the plural display devices such that the plural display devices are detachably attached to the connector. Ishizawa on the other teaches a display (6), which can be detached and power itself after detachment and maintain the display. See col. 6, lines 37-45 and Fig. 1. Ishizawa also teaches a power supply of the personal computer main unit (3) is connected to the power supply pin (31B) of the main connector (31) so that the sheet battery is (67) is recharged when the display device (6) is attached. See col. 5, lines 10-26 and Fig. 5.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Ishizawa's detachable device (6) inside Yamamoto's plural display devices system. One would have been motivated in view of the suggestion in Ishizawa the detachable display (6) as configured in Fig. 1 equivalently performs "displaying the sent information after being detached from the connector". The use of detachable display helps function a display system with enhanced portability as taught by Ishizawa.

Kim on the other hand teaches a detachment of a display unit (140') from a main body 110' whereby electrical communication with the display unit is wireless as shown in Fig. 5 (col. 3, lines 44-46).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yamamoto's display systems to adapt Kim's wireless communication as illustrated in Fig. 5. One would have been motivated in view of the suggestion in Kim that that a wireless communication between the display unit (140') and the main body (110') is functionally equivalent and meets the required feature of "exchanging of information by a wireless system". The use of wireless communication helps function a portable computer with detachable display unit as taught by Kim.

Regarding claim 6, in addition to what has been discussed above, Yamamoto discloses a system data display region (2), which is designed to effect writing when storing data by utilizing the memory characteristics of the ferroelectric liquid crystal. See col. 5, lines 22-27.

Regarding claims 2 and 7, Ishizawa teaches when the detachable display is detached, it displays its stored data by powering itself. See col. 6, lines 38-40.

Regarding claims 3-4, 8-11, and 13-14, Yamamoto teaches a liquid crystal controller (9) which transfers the image data outputted from a host computer (3) to the driver IC of the liquid crystal panel. See col. 6, lines 60-67. In addition, Yamamoto discloses a system data display region (2), which is designed to effect writing when storing data by utilizing the memory characteristics of the ferroelectric liquid crystal. See col. 5, lines 22-27.

Regarding claim 12, Yamamoto teaches a host system supplying image data to the display means and in an event of power interruption. See col.2, lines 46-60. It would have been obvious that the transmission tool by which data is supplied can be wireless. Furthermore, as shown above, Kim teaches a detachment of a display unit (140') from a main body 110' whereby electrical communication with the display unit is wireless ( Fig. 5).

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3. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abdulsalam** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

**Any response to this action should be mailed to:**

Commissioner of patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314**

Hand delivered responses should be brought to Crystal Park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is (703) 306-0377.

Abbas Abdulsalam

Examiner

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July 1, 2004

  
**XIAO WU**  
**PRIMARY EXAMINER**